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AUTHOR Ayers, Claude V.
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ABSTRACT

In order to evaluate the individualized instruction laboratory at Surry Community College in terms of andragogical theory and practice, a study was conducted involving: (1) a survey of the literature to determine the practices and assumptions of adult educational theory: (2) interviews with three adult educators to determine their perceptions of andragogical theory and practice: and (3) a survey of 30 randomly selected adult learners. The survey instrument asked students to rate 22 items related to facilities, instructional materials, instructors' attitudes and effectiveness, and instructional methods. Though all items were rated "average" or better by the majority of the students, the following items achieved less than an "above average" rating: the extent to which the coordinator uses my previous experiences in helping me master new materials and ideas, the desire of the instructor to help students, the number of different materials and equipment available, the convenience of laboratory's location, the extent to which the coordinator projects his desire for me to complete my educational goals, the housing facilities used for the laboratory, the quality of instruction provided, and the meaningfulness of the learning laboratory materials. The report includes a review of the literature, the questionnaire, and raw data. (AYC)

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AN EVALUATION OF AN INSTRUCTIONAL PROGRAM FOR ADULT LEARNERS IN TERMS OF ANDRAGOGICAL THEORY AND PRACTICE

by
Claude V. Ayers, Ed.S.

Surry Community College

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ABSTRACT

Over fifteen thousand adults in Surry and Yadkin counties have not completed high school. An important function of Surry Community College has been to offer an instructional program designed to assist these adults who have dropped out of the public schools in their efforts to complete their education through the high school level. After careful consideration and planning the Continuing Education Division of the college developed an individualized instructional learning laboratory program. This program has been successful in assisting a good number of adults in their efforts to complete high school. The number of public high school drop-outs each year has continued to be above the number of adults who completed high school at Surry Community College. This study involved an evaluation of the instructional program for non-high school graduate adults enrolled in the high school completion program at Surry Community College. This evaluation was expected to help college officials improve the program for adult learners.

This study to evaluate an instructional program for adult learners in terms of andragogical theory and practice involved a review of related literature, an interview of three adult educators, the development and administration of a survey and an evaluation of the survey results. Thirty adults

enrolled in the individualized learning laboratories program for high school completion were selected at random from the total enrolled population for the first month of fall term, 1979.

Eight items considered important to good andragogical theory and practice were rated below the acceptable level selected by the researcher. These items were:

1. The use of previous experiences.
2. The desire of the learning laboratory coordinator to help students.
3. The numbers of equipment and materials available for student use.
4. The convenience of the location of the learning laboratories.
5. The extent to which the coordinator projects his desire for the student to complete educational goals.
6. The housing facilities.
7. The quality of instruction.
8. The extent to which the learning laboratory materials were meaningful.

Recommendations were made as follows:

1. Learning laboratory coordinators should be informed of the results of this study.
2. College coordinators and administrators should work to improve each of the eight items rated below the acceptable level.
3. A second study should be conducted to determine what improvement has been made in the program.

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INTRODUCTION

An important function of Surry Community College since the college opened in 1965 has been to offer a variety of programs of instruction designed to meet the needs of the adult population. One of the most outstanding of these functions has been to provide a high school completion program for interested adults from the estimated nineteen thousand who left the public school before graduating in the college service area.

After careful consideration and planning the Continuing Education Division of Surry Community College developed an individualized instructional laboratory. The individualized instructional laboratory was designed to permit the adult to begin his or her high school studies in each subject area on the appropriate level. The laboratory was scheduled to be open several hours each week. The schedule was also flexible to provide adults, who have a variety of work schedules and family responsibilities, a choice of either morning, afternoon or evening hours for enrollment in the laboratory. Each student, with the assistance of the laboratory coordinator, planned his study/learning schedule according to his individual needs. Adults who achieved a satisfactory score on the various high school subject areas were encouraged to take the General Educational Development Test (GED). Those

adults who completed the GED Test with a satisfactory score, as determined by the North Carolina State Board of Education, were awarded a high school equivalency certificate.

Since the first individualized instructional laboratory was developed in 1965, several hundred adults have used the instructional program to complete high school. In the 1978-1979 academic school year one-hundred and fifty adults completed high school through the learning laboratory programs at Surry Community College.

The success of the individualized instructional laboratories has been measured, in part, by counting the number of adults who graduated each year through the instructional program provided in these laboratories. These numbers point to success; however, there are other numbers which indicate the need for the continued improvement of the instructional program. These numbers are the numbers of public high school students in the college service area, approximately thirty percent of the beginning freshman classes, who have dropped out of high school before graduating. These drop-outs total more than the number of adults who complete high school each year through the individualized programmed instructional laboratories at Surry Community College. Many of these students are believed to drop out of high school because they do not feel that the high school is helping them to achieve their goals. Other students are believed to feel "out of

place" in the high school setting for a variety of reasons.

A few years after having dropped out of high school many adults have indicated that they feel a personal need to complete their high school program. The average age of the adults who have enrolled in the individualized instructional laboratories to complete high school has been approximately twenty-nine. These students are attracted by the opportunity the program offers adults who wish to complete high school. The adults often bring with them a fear of failure and a fear of placing themselves again in a high school program. The fear of failure and the memories of past experiences with educational programs based on theories derived from pedagogy are believed to be major obstacles to the recruitment and retention of adult students. A major point used by college officials in the recruitment of adults who are non-high school graduates has centered around the premise that the high school program at Surry Community College is adult cen- based on the art and science of teaching adults. No study had been made to measure the instructional program in terms of angragogical theory. It was the purpose of this investigation to evaluate the individualized instructional learning laboratories program at Surry Community College in terms of andragogical theory and practice. It was believed by the

researcher that this study would be helpful in improving the instructional program at Surry Community College and that the study would result in both greater retention and increased numbers of adults enrolled in the individualized instructional laboratories at Surry Community College.

The investigation of this study began with a review of literature on the modern practice of adult education. This review was made to determine the basic concepts and practice of an acceptable adult education program. Three adult educators which were considered by the researcher to be successful in their profession were interviewed. These interviews, along with the review of literature, were used to develop the content for a survey. The survey included twenty-two itens designed to measure the degree to which the high school completion program at Surry Community College was based on the basic concepts and characteristics of andragogical theory. Each item on the survey had five possible responses ranging from good (5) to poor (1). Average was given the number three (3). The student survey was administered to thirty adults selected at random from those who were enrolled in the high school completion program at Surry Community College during fall term, 1979. The responses to the survey were totaled and evaluated.

BACKGROUND AND SIGNIFICANCE

Many educators, civic leaders, members of the North Carolina General Assembly, the North Carolina State Board of Education and the members of the faculty and administrtive staff of the community colleges and technical institutes have agreed that a major block to improving the economic standing or standard of living for many North Carolina adults has been the low educational level of many of these adults. The children of non-high school graduate adults are believed to be less inclined to complete high school when compared with the children of high school graduates thus continuing a low standard of living from one generation to another. Often these non-high school graduate adults are found to be lacking in the basic academic skills necessary for the achievement of the technical and vocational skills needed for advancement in occupations. The estimated number of adults in North Carolina who have achieved less than a high school education is more than one million. For these reasons, the North Carolina Department of Community Colleges has been given the responsibility to provide the educational vehicle for those adults who want to continue their education through the high school level.

Surry Community College has provided an instructional vehicle for non-high school graduate adults over the years

through the individualized learning laboratories. These individualized learning laboratories have been considered successful in terms of the numbers of graduates who have completed high school through these facilities.

Though the number of adults who gra uated each year continued to grow, three important facts have indicated the need for continued improvement in the instructional program provided to the adult learner through the individualized learning laboratories as follows:

1. The number of students who have dropped out of the public high schools in the service area (Surry and Yadkin counties) of Surry Community College has continued each year to number well above the number of adults who completed high school through the college program.

2. Not all adults who have enrolled in the individualized learning laboratories for high school completion have remained long enough to master the academic levels needed to complete high school.

3. The lack of academic development has continued to influence the high level vocational skill development needed for higher paying jobs. As a result, many industries which have required skilled labor have not located in Surry or Yadkin counties.

A review of literature was made to determine some of the concepts and practices widely addepted by educators as important in teaching adults. These concepts and practices of andragogical theory were used to develop a survey form in preparation for an evaluation of an instructional program for adult learners.

Roueche (9:2-3) pointed to the necessity for community colleges to provide instruction on the level needed by the student if the student is to be given a second chance to complete his high school education. Roueche further emphasized in "Creating an Environment for Learning"(10:48-49) the importance of accomodating individual differences and added the need for a caring and student-centered learning/teaching environment. Roueche listed five ways teachers can create an environment for learning as follows:

1. Teachers should know each student as an individual, as a unique human being, to the point of at least knowing the student's name wherever he comes in contact with the student.
2. Teachers should demonstrate caring or expectations by affirming student as "ok" people.
3. Teachers should demonstrate caring or expectations by attending to each student.
4. Teachers should demonstrate caring and positive expectations by giving of themselves to students.
5. Teachers should monitor student achievement to provide reinforcement and to assist as soon as possible when a student has become confused.

Roueche and Bloom agree that individuals learn at different rates and that accommodating individual differences is of utmost importance in teaching. Bloom (2:1-11) further noted that the kind and quality of instruction and the amount of time available for learning should be made appropriate to the characteristics and needs of each student. Both Roueche and Bloom emphasized the need for the instructional

program to provide the adult learner with a variety of ways to learn. The strategy for learning and the amount of time needed by the learner for mastery must vary according to each student's needs.

Knowles (3:49-53) stated that the critical element of any adult education program is what happens when a teacher comes face-to-face with a group of learners. According to Knowles, the andragogical approach to teaching and learning is premised on three assumptions about the learning and teaching of adults as follows:

1. Adults can learn. The central proposition on which adult education is based is that adults can learn. This was supported by Edward L. Thorndike in 1927 (3:49-50) when he reported the ability to learn declined only very slowly and very slightly after age twenty. Irving Lorge (3:49-50) found that the decline was in the rate of learning and not intellectual power. His work indicated that even this decline was likely to be minimized by continued use of the intellect.

2. Learning is an internal process. Learning is described, by knowles, as psychologically a process of need-meeting and goal-striving by the learner. This assumption calls for instruction which emphasizes student involvement and interaction. The importance of self-directed learning is also emphasized under this assumption about learning.

3. There are superior conditions of learning and principles of teaching.

The National Association for Public School Adult Education (NAPSE) in How Adults Can Learn More - Faster (7:9-12) goes further in some assumptions than Knowles and Thorndike as follows:

1. Contrary to popular opinion, the mind does not deteriorate with age.

2. Adults are able to do "fast memorizing" more efficiently than young children.

3. Adult learners have a great advantage over youngsters due to the additional years of experience.

4. Adults learn more efficiently because they have stronger reasons for learning.

An important aspect of andragogical theory centers around the recognition that adults are self-directed and that health adults choose experiences which according to Maslow (5:3-34) are self actualizing. Rogers' (8:140-144) student-centered approach to education contributes to andragogical theory and practice and supports many of the ideas held by the humanistic psychologists. Rogers' student-centered approach to education was based on five hypotheses. The parts of the five hypotheses which had implications for this study are:

1. We cannot teach another person directly; we can only facilitate his learning.

2. A person learns significantly only those things which he perceives as being involved in the maintenance of, or enhancement of, the structure of self. This hypothesis underlines the importance of making the learning relevant to the learner.

3. Experience, if assimilated, would involve a change in the organization of self.

4. Experience which is perceived as inconsistant with the self can only be assimilated if the current organization of self is relaxed and expanded to include it.

5. The educational situation which most effectively promotes learning is one in which the threat to the self of the learner is reduced to a minimum.

Knowles has perhaps influenced the development of the theory of andragogy more than any other educator or psychologist. Knowles (4:45-49) listed four main assumptions of andragogical theory which are different from those of pedagogy. These four assumptions in the theory of andragogy, of adult learning, include the changes in self-concept, the role of experience, the readiness to learn and orientation to learning.

Knowles has the most comprehensive treatment of the andragogical approach and its application to the designing and operating of adult educational programs. He emphasizes that the andragogical approach is a process approach or model. The model, according to Knowles, employed by most traditional educators is one in which the instructor decides in advance what skills or knowledge need to be learned. The instructor then arranges the body of content into logical units and selects the most efficient means for transmitting this content. The andragogical instructor (facilitator, change agent) prepares a set of procedures for involving learner in the following: (1) establishing a climate conducive to learning; (2) creating a mechanism for mutual planning; (3) diagnosing the needs for learning; (4) formulating program objectives; (5) designing a pattern of

learning experiences; (6) conducting these learning experiences with suitable techniques and materials; and (7) evaluating the learning outcomes and rediagnosing learning needs (4:100 - 113).

A final major difference between andragogy and pedagogy relates to the use of rewards. Where E. L. Thorndike and others, who derived their concepts of teaching from theories of learning of animals and children, saw teaching as essentially the control or rewards, such as grades, andragogical theorists see reward as more of a personal, motivational force (4:62-63).

The researcher found that the subject of this study involved some to the basic concepts and principles suggested for study in the Learning Theory and Applications guide (6:32-36). In addition, the subject of the study is one which is of central importance to the program for non-high school graduate adults at Surry Community College.

PROCEDURES

This study was designed to evaluate an instructional program for adult learners in terms of andragogical theory and practice. The evaluation of the program for adult learners was conducted through the following procedures:

1. A survey of literature was made to determine some of the practices and assumptions of andragogical theory.

2. Three adult educators, considered by the researcher to be successful in their professions, were interviewed to determine each one's concept of andragogical theory and practice.

3. The survey of literature and the interviews with the three adult educators were used to determine some of the basic practices and assumptions of andragogical theory and practice. The review of literature and the interviews of the three adult educators provided the basis for the development of a survey designed to measure the adult high school completion program at Surry Community College in terms of andragogical theory and practice.

4. The survey was developed. The survey included items designed to measure the degree to which the high school completion program at Surry Community College was based on andragogical theory. The survey of literature and the interviews with three adult educators were analyzed to determine the basic characteristics and concepts of andragogical theory and practice. These basic characteristics and concepts of andragogical theory and practice were used to determine the items to be included on the survey form. The survey form included, for example, items concerning the learning environment, the learning/strategies available, the quality of instruction and other items from the survey of literature and the three interviews with adult educators relating to andragogical theory and practice. Each item on the survey included five possible responses ranging from good (5) to poor (1). Average was given a number of three (3). The survey was administered to thirty adult students, selected at random, from the three-hundred adults enrolled in the high school completion program at Surry Community College during the first month of fall term, 1979. The mean response score for each item on the thirty survey forms was used by the researcher to evaluate that item. For example, if the total mean score for the thirty survey responses for item number one was three (3) the item was evaluated by the students as average. Any item which was found to be rated with a mean score below "above average" (4) was considered below the acceptable level desired for the adults enrolled in the high school completion program at Surry

Community College. The mean average response for each item was believed by the researcher to be the most appropriate statistical method of analysis for the purpose of this study.

5. The reliability of the survey was tested by administering the survey to five non-high school graduate adult learners, selected at random, enrolled in the individualized instructional laboratories. After one week the survey was again administered to the same five adult learners to determine if any one of the five adult learners changes his or her responses. Since each adult give the same response on each item of the survey on the second administration as he or she did on the first administration of the survey, the survey was considered reliable. The survey was considered valid after the material from the survey of literature, the interviews with three adult educators and the test of reliability were used.

6. Comments made by adults who completed the survey were noted and discussed briefly in the results section of the study.

The following limitations were found:

1. No literature was found on evaluating an educational program for adult learners in terms of androgogical theory and practice.

2. No studies were found which compared educational programs for adults based on andragogy with educational programs for adults based on pedagogy.

3. The researcher recognized that the adult sample who completed the survey may have had limited information and experience from which to rate some items included in the survey. (Two students selected to complete the survey were found to have been enrolled in the learning laboratories less than two weeks when the survey was administered.)

The following assumptions were made:

1. The random sample of the population was representative of the total population.

2. Each adult in the random sample group was familiar with the subject covered in each item in the survey to the extent that he or she could respond effectively.

3. The interviews with three adult educators and the review of literature was thorough to the extent that most of the elements of good andragogical theory and practice were included on the survey form.

RESULTS

Thirty adult learners enrolled in the high school completion learning laboratories responded to the survey by checking his/her rating to each item. The survey form included instructions for each adult to follow in rating the twenty-two items. Each item on the survey (Appendix A) included five possible answers or ratings. Each of these ratings was assigned a number value ranging from good (5) to poor (1). The number values assigned to each rating checked by the thirty adult learners selected at random from the population were totaled for each of the twenty-two items on the survey. The mean score (Appendix C) for each item was calculated. Six adult students made comments concerning one or more of the twenty-two items on the survey. Each of these comments were very positive toward the program.

The mean score for the twenty-two items ranged from 3.80 (3 = average) to 4.36 (4 = above average). Eight items rated on the survey received a mean score ranging from 3.80

to 3.96. These eight items, listed in Table I, were below the acceptable level determined by the researcher for adult students enrolled in the high school completion program at Surry Community College.

Table I

Survey Items Rated Below "Above Average"

Item	Mean Score
1. The extent to which the co-ordinator uses my previous experiences in helping me to master new materials and ideas	3.80
2. The desire of the instructor (learning laboratory coordinator) to help students	3.86
3. The number of different materials and equipment available for student use	3.90
4. The convenience of the location of the learning laboratory	3.93
5. The extent to which the coordinator projects his desire for me to complete my educational goals	3.93
6. The housing facilities used for the individualized learning laboratory	3.96
7. The quality of instruction provided to the student by the learning laboratory coordinator	3.96
8. The extent to which the learning laboratory materials are meaningful	3.96

DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

The evaluation of the individualized instructional learn-

ing laboratories program for non-high school graduates in terms of andragogical theory and practice was believed by the researcher, after a review of the literature, to be the first study on this subject. The researcher did use the review of literature along with interviews with three adult educators, to determine each of the items for the student survey form. The review of the literature on andragogical theory and practice was believed to be comprehensive since comments by the sample group did not include any additional items.

The study provided the researcher information on various parts of andragogical theory and practice which need to be improved. These parts of andragogical theory and practice which need to be improved include:

1. The extent to which the coordinators use the previous experiences of the learner in assisting the learner to master new materials and ideas.
2. The extent to which each coordinator projects his or her desire to help students learn and meet their educational goals.
3. The quality of instruction provided by the student
4. The number of different learning/teaching materials and equipment available for student use.
5. The extent to which materials are considered meaningful to adult learners.
6. The location and housing of the learning laboratory facilities.

The implications of this study are:

1. While the sample population rated fourteen items

on the survey above average, eight items need to be improved. The improvement of these imply an improvement to the program.

2. An improvement in the instructional program would result in more adults who complete high school.

3. An improved instructional program would help to recruit additional non-high school graduates into the learning laboratories.

The following recommendations were made as a result of this study:

1. Learning laboratories coordinators should be informed of the results. This information should include the items rated above average as well as those eight items rates below the acceptable level.

2. The coordinators and administrators should work to improve each of the eight items rated below the acceptable level.

3. A second study to evaluate the instructional program in terms of andragogical theory and practice should be conducted to determine what improvement has taken place.

It was believed by the researcher that this study to evaluate the program of instruction provided through the individualized instructional learning laboratories in terms of andragogical theory and practice would help Surry Community College in its effort to recruit and retain more non-high school graduate adults. The researcher believed that this study would be helpful to learning laboratory coordinators and administrators as each of these two groups work together to provide a better educational program. These efforts are expected to further increase the number of high school graduate adults in Surry and Yadkin counties.

APPENDIXES

APPENDIX A

Individualized Learning Laboratory
Student Survey

Purpose: This survey form is expected to provide the information needed for an evaluation of the instructional program provided to you, the adult learner, through the individualized instructional learning laboratory.

Directions: Please read each item below and check ( ) your rating to each item. Add any comments you wish on the comment section at the end of the survey. Please do not sign your name. Thank you for your assistance.

Please rate the following:

___ good
___ above average
___ average
___ below average
___ poor

1. The housing facilities used for the individualized learning laboratory.

___ good
___ above average
___ average
___ below average
___ poor

2. The extent to which the desk chairs and other furniture in the laboratory are appropriate for adult student's use

___ good
___ above average
___ average
___ below average
___ poor

3. The convenience of the location of the learning laboratory

___ good
___ above average
___ average
___ below average
___ poor

4. The number of different materials and equipment available for student use

___ good
___ above average
___ average
___ below average
___ poor

5. The convenience of the scheduled hours of operation for the learning laboratory

___ good
___ above average
___ average
___ below average
___ poor

6. The desire of the instructor (learning laboratory coordinator) to help students

___ good
___ above average
___ average
___ below average
___ poor

7. The attitude of the coordinator toward students (Does he view you as an "ok person?"

___ good
___ above average
___ average
___ below average
___ poor

8. The willingness and availability of the coordinator to help me

___ good
___ above average
___ average
___ below average
___ poor

9. The variety of ways (teaching methods and materials) used to accommodate individual student differences

___ good
___ above average
___ average
___ below average
___ poor

10. The extent to which the learning laboratory environment is designed to be free from fear of failure

___ good
___ above average
___ average
___ below average
___ poor

11. The availability of the learning laboratory coordinator to help a student when he/she is confused

___ good
___ above average
___ average
___ below average
___ poor

12. The extent to which the coordinator follows and records each individual student's mastery of the materials

___ good
___ above average
___ average
___ below average
___ poor

13. The extent to which the coordinator expects me to complete my educational goals

___ good
___ above average
___ average
___ below average
___ poor

14. The quality of instruction provided to the student by the learning laboratory coordinator

___ good
___ above average
___ average
___ below average
___ poor

15. The extent to which the coordinator uses my previous experiences in helping me to master new materials and ideas

___ good
___ above average
___ average
___ below average
___ poor

16. The extent to which each individual student is free to set his/her goals and follow his/her individual interests

___ good
___ above average
___ average
___ below average
___ poor

17. The value of the time spent in the learning laboratory

___ good
___ above average
___ average
___ below average
___ poor

18. The extent to which the coordinator projects his desire for me to complete my educational goals

___ good
___ above average
___ average
___ below average
___ poor

19. The extent to which the learning laboratory materials are meaningful

___ good
___ above average
___ average
___ below average
___ poor

20. The extent to which the learning laboratory is designed to help me achieve my educational goals.

___ good
___ above average
___ average
___ below average
___ poor

21. The extent to which the learning laboratory program permits multi-entry and multi-exit points during the academic year.

___ good
___ above average
___ average
___ below average
___ poor

22. The extent to which student fees and costs are held to a minimum

Please write any comments you feel may be helpful in the evaluation of the individualized learning laboratory program

APPENDIX B

Individualized Learning Laboratory
Student Survey

The number of responses to each item below was thirty (30). The total number of adults who checked each rating is listed beside that rating.

12	good	1. The housing facilities used for the individualized learning laboratory
8	above average	
8	average	
1	below average	
1	poor	
15	good	2. The extent to which the desk, chairs and other furniture in the laboratory are appropriate for adult students' use
5	above average	
7	average	
2	below average	
1	poor	
13	good	3. The convenience of the location of the learning laboratory
6	above average	
9	average	
0	below average	
2	poor	
13	good	4. The number of different materials and equipment available for student use
4	above average	
11	average	
1	below average	
1	poor	
13	good	5. The convenience of the scheduled hours of operation for the learning laboratory
8	above average	
7	average	
1	below average	
1	poor	

8 good 13 above average 7 average 1 below average 1 poor	6. The desire of the instructor (learning laboratory coordinator) to help students
12 good 10 above average 7 average 1 below average 0 poor	7. The attitude of the coordinator toward students (Does he view you as an "ok person?")
9 good 14 above average 6 average 1 below average 0 poor	8. The willingness and availability of the coordinator to help me
17 good 5 above average 7 average 1 below average 0 poor	9. The variety of ways (teaching methods and materials) used to accommodate individual differences
17 good 5 above average 7 average 1 below average 0 poor	10. The extent to which the learning laboratory environment is designed to be free from fear of failure
11 good 12 above average 6 average 1 below average 0 poor	11. The availability of the learning laboratory coordinator to help a student when he/she is confused
16 good 8 above average 5 average 1 below average 0 poor	12. The extent to which the coordinator follows and records each individual student's mastery of the materials

18	good	13. The extent to which the coordinator expects me to complete my educational goals
1	above average	
5	average	
3	below average	
0	poor	
12	good	14. The quality of instruction provided to the student by the learning laboratory coordinator
8	above average	
7	average	
3	below average	
0	poor	
14	good	15. The extent to which each individual student is free to set his/her goals and follow his/her individual interests
7	above average	
6	average	
2	below average	
1	poor	
12	good	16. The extent to which the coordinator uses my previous experiences in helping me to master new materials and ideas
4	above average	
11	average	
2	below average	
1	poor	
12	good	17. The value of the time spent in the learning laboratory
7	above average	
10	average	
1	below average	
0	poor	
13	good	18. The extent to which the coordinator projects his desire for me to complete my educational goals
5	above average	
9	average	
3	below average	
0	poor	
14	good	19. The extent to which the learning laboratory materials are meaningful
5	above average	
7	average	
4	below average	
0	poor	

17	good	20. The extent to which the learning laboratory is designed to help me achieve my educational goals
5	above average	
5	average	
3	below average	
0	poor	

18	good	21. The extent to which the learning laboratory program permits multi-entry and multi-exit points during the academic year
5	above average	
7	average	
0	below average	
0	poor	

17	good	22. The extent to which student fees and costs are held to a minimum
4	above average	
9	average	
0	below average	
0	poor	

APPENDIX C

Individualized Learning Laboratory Student Survey Means Scores

ITEM		MEAN SCORE
1.	The extent to which the coordinator uses my previous experiences in helping me to master new materials and ideas	3.80
2.	The desire of the instructor (learning laboratory coordinator) to help students	3.86
3.	The number of different materials and equipment available for student use	3.90
4.	The convenience of the location of the learning laboratory	3.93
5.	The extent to which the coordinator projects his desire for me to complete my educational goals	3.93
6.	The housing facilities used for the individualized learning laboratory	3.96
7.	The quality of instruction provided to the student by the learning laboratory coordinator	3.96
8.	The extent to which the learning laboratory materials are meaningful	3.96
9.	The value of the time spent in the learning laboratory	4.00
10.	The extent to which the desk chairs and other furniture in the laboratory are appropriate for adult students' use	4.03
11.	The convenience of the scheduled hours of operation for the learning laboratory	4.03
12.	The willingness and availability of the coordinator to help me	4.03
13.	The extent to which each individual student is free to set his/her goals and follow his/her individual interests	4.03
14.	The attitude of the coordinator toward students (Does he view you as an "ok person?"	4.10
15.	The availability of the learning laboratory coordinator to help a student when he/she is confused	4.10

	ITEM	MEAN SCORE
16.	The extent to which the coordinator expects me to complete my educational goals	4.13
17.	The extent to which the learning laboratory is designed to help me achieve my educational goals	4.20
18.	The variety of ways (teaching methods and materials) used to accommodate individual student differences	4.26
19.	The extent to which the learning laboratory environment is designed to be free from fear of failure	4.26
20.	The extent to which student fees and costs are held to a minimum	4.26
21.	The extent to which the coordinator follows and records each individual student's mastery of the materials	4.30
22.	The extent to which the learning laboratory program permits multi-entry and multi-exit points during the academic year	4.36

REFERENCES

1. Bugelski, B. R. The Pyschology of Learning Applied to Teaching. New York: Bobbs-Merrill Co., 1971.

2. Bloom, Benjamin S. Taxonomy of Educational Objectives: Handbook I: Cognitive Domain. New York: David Mckay, Co., 1956.

3. Knowles, Malcolm S. The Modern Practice of Adult Education: Andragogy Versus Pedagogy. New York: Association Press, 1972.

4. Knowles, Malcolm S. The Adult Learner: A Neglected Species. Houston: Gulf Publishing Co., 1973.

5. Maslow, A. H. Motivation and Personality. New York: Harper and Row, 1970.

6. Losak, John. Learning Theory and Applications. Fort Lauderdale: Nova University Press, 1974.

7. National Associaton for Public School Education. How Adults Can Learn More -- Faster. Washington, D. C.: National Education Association, 1961.

8. Rogers, C. R. Client-Centered Therapy. Boston: Houghton Mifflin Co., 1951.

9. Roueche, John E. Salvage, Redirection or Custody? Washington, D.C.: American Association of Junior Colleges, 1968.

10. Roueche, John E. "Creating an Environment for Learning," Community and Junior College Journal, Vol. 46, No. 6, March 1976.

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